Application Serial No. 10/524,700 Attorney Docket No. 10191/3804

Second Supplemental/Replacement Reply to

Office Action of January 25, 2008 & Notice of May 12, 2009

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF THE CLAIMS:

- 1-6. (Canceled).
- 7. (Currently Amended) A method for automatically initiating an emergency braking sequence, comprising:

performing a preliminary warning braking in a motor vehicle;

increasing a braking force during the preliminary warning braking until at least one wheel reaches a slip limit;

responsive to one of the braking force and a correlated state variable attaining a defined maximum value, ceasing the increasing of the braking force;

determining an achievable vehicle deceleration during the preliminary warning braking;

responsive to one of the braking force and a correlated state variable attaining the defined maximum value, using a high estimated value of the attainable vehicle deceleration; and varying a time of initiating an emergency braking as a function of the determined achievable vehicle deceleration.

- 8. (Previously Presented) The method as recited in Claim 7, further comprising: decelerating at least one wheel of the motor vehicle to a slip limit during the preliminary warning braking.
- 9. (Canceled).
- 10. (Previously Presented) The method as recited in Claim 7, wherein:

 the attainable vehicle deceleration is represented by a parameter that indicates a coefficient of friction between a roadway and tires.
- 11. (Previously Presented) The method as recited in Claim 10, further comprising:
 determining the coefficient of friction during preliminary warning braking; and
 controlling, in accordance with the determined coefficient of friction, a braking pressure
 buildup when initiating the emergency braking.

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12 (Currently Amended) A control unit, comprising:

a situation analyzer unit for determining a point in time for initiating a warning braking and a later, provisional point in time of initiating an emergency braking on the basis of a measured distance to an obstacle and a measured relative velocity of this obstacle, as well as on the basis of a provisional value of a vehicle deceleration; and

an ABS/ESP control unit for modulating a braking pressure as a function of a slip condition of a braked wheel while computing a coefficient of friction of a roadway, the coefficient of friction being determined during the warning braking, the ABS/ESP control unit reporting the determined coefficient of friction to the situation analyzer unit, wherein the braking pressure during the warning braking has a defined maximum value so that the coefficient of friction will be set to a high estimated value if the braking pressure during the warning braking reaches the defined maximum value, wherein:

the situation analyzer unit corrects the provisional point in time of initiating an emergency braking on the basis of the vehicle deceleration as given by the determined coefficient of friction.

- 13. (New) The control unit as recited in Claim 12, wherein at least one wheel of the motor vehicle is decelerated to a slip limit during the preliminary warning braking.
- 14. (New) The control unit as recited in Claim 12, wherein the attainable vehicle deceleration is represented by a parameter that indicates a coefficient of friction between a roadway and tires.
- 15. (New) The control unit as recited in Claim 14, wherein the coefficient of friction is determined during preliminary warning braking, and in accordance with the determined coefficient of friction, a braking pressure buildup is controlled when initiating the emergency braking.
- 16. (New) The control unit as recited in Claim 12, wherein at least one wheel of the motor vehicle is decelerated to a slip limit during the preliminary warning braking, wherein the attainable vehicle deceleration is represented by a parameter that indicates a coefficient of friction between a roadway and tires, and wherein the coefficient of friction is determined during

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preliminary warning braking, and in accordance with the determined coefficient of friction, a braking pressure buildup is controlled when initiating the emergency braking.

17. (New) The method as recited in Claim 7, further comprising:

decelerating at least one wheel of the motor vehicle to a slip limit during the preliminary warning braking;

determining the coefficient of friction during preliminary warning braking; and controlling, in accordance with the determined coefficient of friction, a braking pressure buildup when initiating the emergency braking;

wherein:

the attainable vehicle deceleration is represented by a parameter that indicates a coefficient of friction between a roadway and tires.